

Claims

What is claimed is:

1. A cylinder head for an internal combustion engine, the cylinder head comprising a top deck and at least one integrally cast rocker shaft pedestal.
2. A cylinder head as claimed in Claim 1, in which the at least one integrally cast rocker shaft pedestal includes a top surface, wherein the top deck is machined in a same plane as the top surface of the at least one rocker arm pedestal.
3. A cylinder head as claimed in Claim 1, in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls adapted for correctly spacing adjacent rocker arms on each side of the pedestal.
4. A cylinder head as claimed in Claim 2, in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls adapted for correctly spacing adjacent rocker arms on each side of the pedestal.
5. A cylinder head as claimed in Claim 1, in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the pedestal, which spacing steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal.

6. A cylinder head as claimed in Claim 2, in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the pedestal, which spacing steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal

7. A cylinder head as claimed in Claim 3, in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the pedestal, which spacing steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal

8. A cylinder head as claimed in Claim 4, in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the pedestal, which spacing steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal

9. A cylinder head as claimed in Claim 5, in which each sidewall includes a second step formed beneath the spacing step.

10. A cylinder head as claimed in Claim 6, in which each sidewall includes a second step formed beneath the spacing step.

11. A cylinder head as claimed in Claim 7, in which each sidewall includes a second step formed beneath the spacing step.

12. A cylinder head as claimed in Claim 8, in which each sidewall includes a second step formed beneath the spacing step.

13. An internal combustion engine comprising:
a cylinder block;
a cylinder head having a top deck and at least one integrally cast rocker shaft pedestal; and
a rocker shaft mounted on the at least one rocker shaft pedestal,
the rocker shaft having a plurality of rocker arms mounted thereon,
wherein the rocker shaft includes at least one flat formed on an underside of the shaft adapted for mating with a top of the at least one rocker shaft pedestal.
14. An internal combustion engine as claimed in Claim 13, in which the at least one integrally cast rocker shaft pedestal includes a top surface, wherein the top deck is machined in a same plane as the top surface of the at least one rocker arm pedestal.
15. An internal combustion engine as claimed in Claim 13 in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls adapted for correctly spacing adjacent rocker arms on each side of the pedestal.
16. An internal combustion engine as claimed in Claim 13, in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the pedestal, which spacing steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal.
17. An internal combustion engine as claimed in Claim 14, in which the at least one rocker shaft pedestal includes a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the pedestal, which spacing

steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal.

18. An internal combustion engine cylinder head as claimed in Claim 16, in which each sidewall includes a second step formed beneath the spacing step.

19. A method for manufacturing a cylinder head assembly, comprising the steps of:

providing a cylinder head having at least one integrally cast rocker shaft pedestal; and

fixing a rocker shaft assembly on the at least one integrally cast rocker shaft pedestal, the rocker shaft assembly including a rocker shaft and at least one rocker arm.

20. A method according to Claim 19, including the sequential steps of:

positioning the at least one rocker arm on the rocker shaft by means of a positioning jig;

placing the rocker shaft including the positioning jig on the at least one rocker shaft pedestal;

removing the positioning jig from the rocker shaft; and

fixing the rocker shaft on the at least one rocker shaft pedestal.